

[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0991; Product Identifier 2017-SW-050-AD]

**RIN 2120-AA64** 

Airworthiness Directives; MD Helicopters Inc. (MDHI) Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for MDHI Model

369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters.

This proposed AD would require inspecting each main rotor blade (MRB) for a crack.

This proposed AD is prompted by reports of cracked MRBs. The actions of this proposed

AD are intended to address an unsafe condition on these helicopters.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60]

DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
  - <u>Fax</u>: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket
   Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
   Avenue SE, Washington, DC 20590-0001.

Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0991; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For Helicopter Technology Company, LLC service information identified in this proposed rule, contact Helicopter Technology Company, LLC, 12902 South Broadway, Los Angeles, CA 90061; telephone (310) 523-2750; or at www.helicoptertech.com. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

For MD Helicopters service information identified in this proposed rule, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at http://www.mdhelicopters.com.

**FOR FURTHER INFORMATION CONTACT:** Galib Abumeri, Aviation Safety Engineer, Los Angeles ACO Branch, Compliance and Airworthiness Division, FAA,

3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5374; email galib.abumeri@faa.gov.

### SUPPLEMENTARY INFORMATION:

### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

## **Discussion**

We propose to adopt a new AD for MDHI Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters with a Helicopter Technology Company, LLC (HTC) MRB part number 369A1100, 369D21100, 369D21102, 369D21120, 369D21121, 369D21123, 500P2100, or 500P2300 installed.

This proposed AD would require repetitively inspecting the MRB trim tab for gouges, nicks, scratches, and cracks.

This proposed AD is prompted by reports of two operators finding cracks on an HTC-manufactured MRB. In both cases, the cracking was located on the MRB skin adjacent to the trim tab, and they were discovered following flights in which an increase in vibration levels was noticed. HTC determined the root cause of the cracking to be fatigue. HTC also stated that there was evidence of impact damage, filing, and sanding under the paint of the cracked MRBs. If not detected and corrected, this condition could result in failure of an MRB and subsequent loss of control of the helicopter.

### **FAA's Determination**

We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

### **Related Service Information**

We reviewed HTC Mandatory Service Bulletin Notice No. 2100-9, dated May 25, 2017 (SB 2100-9), which contains procedures for inspecting each MRB for a crack in an area adjacent to the inboard edge of the MRB trim tab.

We also reviewed MD Helicopters Service Bulletin No. SB369D-221, SB369E-119, SB369F-106, SB369H-257, SB500N-057, and SB600N-069, each dated April 2, 2018. This service information specifies inspecting the MRBs for cracks near the trim tab by following the instructions in SB 2100-9.

## **Proposed AD Requirements**

This proposed AD would require, within 25 hours time-in-service and thereafter at each 100-hour or annual inspection, inspecting each MRB trim tab end at the trailing edge corner where the trim tab and MRB meet for cracks, and inspecting the top and bottom surface of each MRB for a crack in the area adjacent to inboard trim tab the trim tab corner for a crack, from the trailing edge towards the leading edge. If there is a crack, this proposed AD would require replacing the MRB.

## Differences Between this Proposed AD and the Service Information

The service information specifies procedures for inspecting each MRB for nicks, gouges, and scratches. This proposed AD does not, as the unsafe condition concerns a crack in the MRB. This proposed AD would require using a 10X magnifying glass for both inspections, while the service information only specifies this level of magnification for the inspection of the top and bottom surfaces of the MRB.

## **Costs of Compliance**

We estimate that this proposed AD would affect 622 helicopters of U.S. Registry.

At an average labor rate of \$85 per work-hour, we estimate that operators may incur the following costs in order to comply with this AD. Inspecting one MRB would require about 0.1 work-hour, for a cost per helicopter of \$43 for MDHI Model 369-series and 500N helicopters and \$51 for MDHI Model 600N helicopters, and a total cost of \$25,320 to U.S. operators per inspection cycle.

If required, replacing one MRB would require 3 work-hours, and required parts would cost \$13,000, for a cost per MRB of \$13,255.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**MD Helicopters Inc.:** Docket No. FAA-2018-0991; Product Identifier 2017-SW-050-AD.

## (a) Applicability

This AD applies to MD Helicopters Inc. Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters, certificated in any category, with a

main rotor blade (MRB) part number 369A1100, 369D21100, 369D21102, 369D21120, 369D21121, 369D21123, 500P2100, or 500P2300, all dash numbers, installed.

## (b) Unsafe Condition

This AD defines the unsafe condition as a crack in an MRB. This condition could result in failure of the MRB and subsequent loss of control of the helicopter.

## (c) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

# (d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

# (e) Required Actions

Within 25 hours time-in-service, and thereafter at each 100-hour inspection or annual inspection, whichever occurs first:

- (1) Using a 10X or higher power magnifying glass and a light, inspect each MRB trim tab end at the trailing edge corner where the trim tab and MRB meet for a crack. If there is a crack, before further flight, replace the MRB.
- (2) Using a 10X or higher power magnifying glass and a light, inspect the top and bottom surface of each MRB adjacent to the inboard trim tab corner for a crack, from the trailing edge towards the leading edge. If there is a crack, before further flight, replace the MRB.

## (f) Alternative Methods of Compliance (AMOC)

- (1) The Manager, Los Angeles ACO Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Galib Abumeri, Aviation Safety Engineer, Los Angeles ACO Branch, Compliance and Airworthiness Division, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5374; email 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

## (g) Additional Information

- (1) Helicopter Technology Company, LLC Mandatory Service Bulletin Notice No. 2100-9, dated May 25, 2017, which is not incorporated by reference, contains additional information about the subject of this AD. For Helicopter Technology Company, LLC service information identified in this AD, contact Helicopter Technology Company, LLC, 12902 South Broadway, Los Angeles, CA 90061; telephone (310) 523-2750; or at www.helicoptertech.com.
- (2) MD Helicopters Service Bulletin No. SB369D-221, SB369E-119, SB369F-106, SB369H-257, SB500N-057, and SB600N-069, each dated April 2, 2018, which are not incorporated by reference, contain additional information about the subject of this AD. For MD Helicopters service information identified in this AD, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd.,

Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at http://www.mdhelicopters.com.

(3) You may review a copy of information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

# (h) Subject

Joint Aircraft Service Component (JASC) Code: 6210 Main Rotor Blade. Issued in Fort Worth, Texas, on November 14, 2018.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2018-25497 Filed: 11/23/2018 8:45 am; Publication Date: 11/26/2018]